Application No.: 10/582,919 Filing Date: April 12, 2007

## AMENDMENTS TO THE CLAIMS

Please replace all prior versions of the claims with the following listing of the claims. Please note that in the amendments to the claims, deletions are indicated by strikethrough (e.g. deletion) or double brackets (e.g. [[word]]) and additions to the claims are underlined (e.g. addition).

 (Previously Presented) A dental implant for insertion into a hole formed in jaw bone and overlying soft tissue, the dental implant comprising:

an upper portion to be placed against an upper edge of the jaw bone, the upper portion comprising at least one groove which extends all around an outer surface of the upper portion to form a closed loop and which extends substantially in a cross sectional plane at right angles to the longitudinal axis of the implant, said groove having a cupshaped cross section and having a depth of between about 50 - 100  $\mu$ m and having a width of between about 70 - 160  $\mu$ m.

(Previously Presented) The dental implant as in claim 1, wherein each groove has a cross section of semi-circular shape.

## (Canceled)

- (Previously Presented) The dental implant as in claim 1, wherein each groove has a cross section of hyperbola shape or semi-elliptical shape.
- (Previously Presented) The dental implant as in claim 1, wherein each groove has a rectangular cross section with rounded corners.

## (Canceled)

- (Previously Presented) The dental implant as in Claim 1, wherein the ingrowth
  of bone into said groove prevents visible exposure of these parts.
- (Previously Presented) The dental implant as in claim 1, wherein bone ingrowth established in the groove also prevents bacteria and/or organisms from passing down from the upper parts of the dental implant to the underlying parts of the dental implant.
- (Previously Presented) The dental implant as in claim 1, wherein the groove is located at an upper part of the upper portion.

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(Previously Presented) The dental implant as in claim 1, wherein the dental
implant includes a groove of the upper portion that is coordinated with grooves on another
portion of the dental implant,

- 11. (Canceled)
- (Previously Presented) The dental implant as in claim 1, wherein the depth of the groove is about 70 µm.
  - 13. (Canceled)
- (Previously Presented) The dental implant as in claim 1, wherein the width of the groove is about 110 µm.
- (Previously Presented) A method of placing a dental implant, the method comprising:

providing an implant having an upper portion comprising at least one groove which extends in a closed track around a periphery of the implant and which extends substantially in a cross sectional plane at right angles to the longitudinal axis of the implant, said groove having a cup-shaped cross section and having a depth of between about 50 - 100 um and having a width of between about 70 - 160 um:

installing the implant into a jaw bone of a patient; and

positioning the upper portion of the implant against an upper edge of the jaw bone, the groove stimulating bone movement and bone ingrowth to form a barrier against substantial or visible subsidence, around the portion, of the jaw bone with overlying soft tissue.

- (Previously Presented) The dental implant as in claim 1, wherein the groove extends in a continuous loop around the outer surface of the upper portion of the implant.
- (Previously Presented) The method as in claim 15, wherein the groove extends in a continuous loop around the outer surface of the upper portion of the implant.
- 18. (Previously Presented) The method as in claim 15, further comprising aligning an arc-shaped portion of the implant to follow a correspondingly arc-shaped edge of the jaw bone.

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19. (Previously Presented) The method as in claim 15, further comprising positioning the groove below a top surface of the jaw bone adjacent the upper edge of the jaw bone.

- 20. (New) The dental implant as in claim 1, further comprising an implant part situated above the upper portion.
- (New) The dental implant as in claim 20, wherein the implant part situated above the upper portion is provided without any groove(s).
- (New) The dental implant as in claim 1, further comprising an outer thread by means of which the implant can be screwed into the hole.
- (New) The method as in claim 15, wherein the implant further comprises an
  implant part situated above the upper portion.
- (New) The method as in claim 23, wherein the implant part situated above the upper portion is provided without any groove(s).
- 25. (New) The method as in claim 15, wherein the implant further comprises an outer thread by means of which the implant can be screwed into the hole.